

Abstract

An apparatus and process for naturally recycling poultry carcasses for use as a nutritional supplement, the apparatus generally consists of four modules: an enzymatic digest medium mixing assembly that self adjusts for pH; a mobile grinding assembly mounted on a truck trailer; a digesting and emulsifying assembly which includes a heated tank and separator; and a drying system. Carcasses are loaded into the grinder, and the ground carcasses are pumped into a storage tank with the enzymatic digest medium to produce a protein soluble mixture. The particle size of this mixture is then further reduced, and transported to a centralized and stationary processing plant for digesting and emulsifying. The remaining emulsified proteins are then dried. The resulting pellet-like pieces are uniformly sized for packaging.